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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,937	06/27/2003	Andrea Piva	35826	6954

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EXAMINER

SHAH, CHIRAG V

ART UNIT PAPER NUMBER

1761

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/608,937	PIVA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chirag V. Shah	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/27/03</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim recites "... according to claim 1...lipid matrix consists of animal triglyceride chosen among bovine tallow or swine lard" adds a broader requirement. It is recommended to place this limitation in independent claim 1.

2. Claim 16 is objected to because of the following informalities: Please replace "feeded" with feed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1761

3. Claims 1, 2, 3, 5, 7, 8, 9, 10,12,14 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan et al (US 5204029).

Morgan et al teaches a microencapsulated composition for food application (abstract, col. 1, lines 3-15) comprising hydrogenated vegetal oils such as: sunflower oil, corn oil, soybean oil, palm oil, corn oil and others. (col. 3, lines 35-60); organic and organic salts such as: citric acid and potassium sorbate (col.5, lines 15-45); and use of flavoring agents (col. 4, lines 42-50 and col.5, lines 15-45) and essential oils (col. 4, lines 42-50).

Morgan et al address the limitations of claims 2, 3, 5, 8-10, 12 and 14. Morgan teaches use of both bovine tallow and swine lard (col. 3, lines 35-45); also, Morgan discloses microencapsulate diameter in the range of 180 – 1000 microns, thus meeting the limitation of instant claim 5 and 14. Furthermore. Morgan has disclosed use of citric acid and potassium sorbate (col. 5,lines 38-45) meeting the limitations of the specific examples disclosed by applicant.

Morgan meets the method of claim 7. Morgan teaches a method of making a composition by placing the homogenous composition of a melted lipid matrix and additives, including an organic salt/acid and essential oils (see col. 3-5 for the composition mixture of the “core material”) in a container and later spray cooled in an enclosed environment. ( see fig. 1, col. 2, lines 32-60).

In light of the above, it is clear that Morgan et al anticipates the presently cited claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-5, 7-14, 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al (US 5204029) in view of Porzio et al. (US 5897897).

Morgan et al teaches a microencapsulated composition for food application (abstract, col. 1, lines 3-15) comprising hydrogenated vegetal oils such as: sunflower oil, corn oil, soybean oil, palm oil, corn oil and others. (col. 3, lines 35-60); organic and organic salts such as: citric acid and potassium sorbate (col.5, lines 15-45); and use of flavoring agents (col. 4, lines 42-50 and col.5, lines 15-45) and essential oils (col. 4, lines 42-50).

Although Morgan discloses that the “core material” which includes the organic acid and organic salts are found in the range of 1% - 35% by weight, (col. 4, lines 50-60) specific

Art Unit: 1761

disclosure of individual ingredients is not made. Moreover, Morgan is silent as to the use of oleoresins, as described in claim 1.

Porzio et al. also in the same field of endeavor of making encapsulation compositions teaches use of organic salts and acids such as: citric acid, fumaric acid and malic acid (col. 9, lines 30-40) in the range of 1-15% (col. 4, ln 15-25). In addition, Porzio discloses the use of oleoresins, herbs, essential oils and other natural aromatizing agents (col. 6, lines 35-60). Given that Porzio et al, in the same field of endeavor as Morgan, it would have been obvious to combine the disclosure of Morgan and add organic salts and oleoresin compounds in the range disclosed by Porzio to arrive at the composition in claim 1 for one skilled in the art and generate the claimed invention with a reasonable expectation of success.

4. Morgan et al address claims 2-5. Morgan teaches use of both bovine tallow and swine lard (col. 3, lines 35-45); also, Morgan discloses microencapsulate diameter in the range of 180 – 1000 microns, thus meeting the limitation of instant claim 5. Furthermore, Morgan has disclosed use of potassium sorbate (col. 5, lines 38-45) and Morgan has generally stated that “core” material is found in the range of 1-35% (col. 4, lines 50-60). Specific disclosure to the amount of potassium sorbate or other organic salts is not made. However, adding organic salts or organic acids in the limitation of claim 4 would have been obvious to one of ordinary skill to achieve the desired results.

5. Claim 7 further requires a method step for preparing the claimed composition. Morgan meets the method of claim 7. Morgan teaches a method of making a composition by placing the

Art Unit: 1761

homogenous composition of a melted lipid matrix and additives, including an organic salt/acid and essential oils (see col. 3-5 for the composition mixture of the “core material”) in a container and later spray cooled in an enclosed environment. ( see fig. 1, col. 2, lines 32-60). Morgan does not specifically state “homogenous mass” or “cold room” as stated in claim 7. However, Morgan states “ the core is the discontinuous or inner phase” and is emulsified and the temperature exceeds the melting point (col. 2, lines 40-60). In addition, the homogenous mixture is later “spray cooled” in the container. Thus, it would be obvious to one of ordinary skill to interpreter “ the core is the discontinuous or inner phase” as a homogenous mixture. Furthermore, spray cooling in a room or spray cooling the mixture in the container would like achieve the same result and thus no distinguishable patentable difference is seen at this time.

6. Claim 16 requires that the disclosed composition is fed to monogastric animals to contrast the development of bacteria or pathogenic fungi in the gastro resistant system. It is the examiner’s position that the composition of Morgan , which contains the same active ingredients as claimed in the applicant’s composition would possess the same beneficial biological and physiological properties. Moreover, feeding this composition would be obvious to one of ordinary skill. The ruminant by pass problems are well known and a composition that can deliver necessary nutrients without degradation is of great demand and thus one skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.


Art Unit: 1761

7. Claim 20 requires the equilibration in the intestinal microbism. As the composition has been disclosed above, it is seen that the intestinal microbism would have been equilibrated by feed in the claimed composition. Therefore it would have been obvious to use a known composition in the method of claim 16 to reach equilibration in the intestinal microbism.

8. Claims 8-14, 17-19 are addressed in paragraphs 3-5 above and thus are obvious for the stated reasons.

9. Claims 6 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al (US 5204029) in view of Porzio et al. (US 5897897), as applied to the above claims, and further in view of Ribier et al (US 5747518),

Morgan is silent as to the inclusion of orthophosphoric acid. Ribier et al in disclosing an invention to encapsulate a lipid matrix. Porzio et al discloses use of this compound in the range of 15% ( col. 13, lines 22-26). Thus it would have been obvious for one of ordinary skill to combine the disclosure made by Morgan and Porzio and add the beneficial of this mineral acid disclosed by Ribier and generate the claimed invention with a reasonable expectation of success.

  
**HELEN PRATT**  
**PRIMARY EXAMINER**



*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag V. Shah whose telephone number is 571-272-2766. The examiner can normally be reached on Mon-Thurs 7:30am to 6pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chirag V. Shah  
Patent Examiner  
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03/06/06

  
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